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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,551	04/19/2004	Valery H. Vanstaan	14494	3439
7590 06/28/2005			EXAMINER	
LISA M. SOLTIS			DURAND, PAUL R	
ILLINOIS TOOL WORKS INC. 3600 WEST LAKE AVENUE		ART UNIT	PAPER NUMBER	
GLENVIEW, IL 60025			3721	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
	10/827,551	VANSTAAN ET AL.
Office Action Summary	Examiner	Art Unit
	Paul Durand	3721
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the d	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on  2a) ☐ This action is FINAL. 2b) ☑ This  3) ☐ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) □ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) □ Claim(s) 1-20 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	wn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on 19 April 2004 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	accepted or b) □ objected to drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). sjected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau	s have been received. s have been received in Applicat nty documents have been receiv	ion No
* See the attached detailed Office action for a list	of the certified copies not receive	ed.
Attachment(s)		
Notice of References Cited (PTO-892)	4) Interview Summary	
Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 04/04.	Paper No(s)/Mail D	

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Marraffino (US 3,610,481).

In regard to claims 1 and 5, Marraffino discloses the invention as claimed including an aerosol dispenser comprised of housing 10, with an open end and a closure 14, functioning as a clamp ring, valve stem 20, in operational relationship with the open end, which reciprocates from an open, retracted position to a closed extended position, fuel metering valve 12, located within the housing, fuel metering chamber 28, which allows a pre measured amount of product, with a second container, with an end of the valve body located in the second container (see Figs. 1-4 and C1,L32 – C2,L69).

In regard to claims 2 and 6, Marraffino discloses the invention as claimed including valve stem 20, with an enlarged portion (no number given, but generally indicated by reference number 21 in figure 4), and lip seal 32 (see Figs. 1 and 4).

In regard to claim 3, Marraffino discloses the invention as claimed including a first end of valve body 12 engaging closure (see Fig. 1).

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In regard to claim 4, Marraffino discloses the invention as claimed including metering chamber 28, having a seals 32 and 33 (see Fig. 1).

In regard to claim 9, metering chamber 28, which surrounds valve stem with a first end engaging seal 33 and second end, with an enlarged portion (no number given, but generally indicated by reference number 21 in figure 4), engaging a second seal (see Figs. 1-4 and C1,L32 – C2,L69).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marraffino in view of Stoody (US 4,431,119).
- 5. Marraffino discloses the invention substantially as claimed except for the use of a biasing element to bias the valve stem in the closed position. However, Stoody teaches that it is old and well known in the art to provide biasing spring 73 located between the valve stem 37 and metering chamber 47, which biases a radial portion 43 against a seal 65 in the closed position for the purpose of preventing leakage of contents when not being used (see Figs. 6-8). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the

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invention of Marraffino with the biasing means as taught by Stoody for the purpose of preventing leakage of contents.

6. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marraffino in view of Tsutsui (US 6,202,900).

In regard to claims 11,12,15 and 16, Marraffino discloses the invention substantially as claimed including an aerosol dispenser comprised of housing 10, with an open end and a closure 14, valve stem 20, in operational relationship with the open end, which reciprocates from an open, retracted position to a closed extended position, fuel metering valve 12, located within the housing, fuel metering chamber 28, which allows a pre measured amount of product, with a second container, with an end of the valve body located in the second container (see Figs. 1-4 and C1,L32 – C2,L69). What Marraffino does not disclose is the use of an aerosol container, which can be refilled. However, Tsutsui teaches that it is old and well known in the art to provide an aerosol container 11, with a valve stem 13, valve body 12 and metering chamber 21, which is refillable, when the valve stem is retracted past the open position, with the valve stem in the closed position, when it is fully extended for the purpose of refilling a container with product. (see Figs. 1-3 and C4,L57 – C8,L16). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Marraffino with the filling means as taught by Tsutsui for the purpose of refilling a container with product.

In regard to claims 10,13 and 17, the modified invention of Marraffino discloses the invention substantially as claimed including lip seal 18, which engages an enlarged

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potions of the valve stem in a wiping manner by applying pressure against the stem (generally below reference number 26 in figure 1) in the open position, but defines a fuel passage when the valve stem is in the closed and fill positions for the purpose of ensuring a correct amount of product is released (see Tsutsui Figs. 1-3).

In regard to claims 14 and 18, the modified invention of Marraffino discloses the invention substantially as claimed including slots (indicated by arrows next to reference number 25 in figure 3), which facilitates fluid communication within an interior of the container 11 for the purpose of filling an aerosol container (see Tsutsui Fig. 3).

7. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marraffino in view of Nikolich (US 4,483,474).

Marraffino discloses the invention substantially as claimed including an aerosol dispenser comprised of housing 10, with an open end and a closure 14, valve stem 20, in operational relationship with the open end, which reciprocates from an open, retracted position to a closed extended position, fuel metering valve 12, located within the housing, fuel metering chamber 28, which allows a pre measured amount of product, with a second container, with an end of the valve body located in the second container (see Figs. 1-4 and C1,L32 – C2,L69). What Marraffino does not disclose is the use of an aerosol container to be used in a combustion powered tool. However, Nikolich teaches that it is old and well known in the art of tool driving to provide a combustion powered toll which is powered by a fuel cell 330, comprised of internal container 333, propellant area 335 and valve stem 332 for the purpose of providing a combustible fuel in aerosol form to a tool. (see Figs. 14,16 and C17,L34-60).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Marraffino with the combustion tool as taught Nikolich for the purpose of providing a combustible fuel in aerosol form to a tool.

### Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ward, Waldherr, Adalberto, Brunuerie, Yquel, Wilde, Kaeser Green, Kellner, Kopp, Fransen, Liu and Yquel have been cited to show devices having similar structure.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 571-272-4459. The examiner can normally be reached on 0730-1800, Monday Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Paul Durand June 23, 2005

**Primary Examiner** 

571-272-4460